

## CLAIMS

1. A method of controlling an air/fuel ratio in an internal combustion engine, comprising the steps:

purging a hydrocarbon trap; and

adjusting the air/fuel ratio in the engine in response to said hydrocarbon trap purging.

2. The method of claim 1 wherein said adjusting step comprises biasing said engine air/fuel ratio rich.

3. The method of claim 2, wherein said purging step comprises providing air from an air supply device to an exhaust stream upstream of said hydrocarbon trap.

4. The method of claim 3, wherein said air supply device is an air pump.

5. A method of controlling an air/fuel ratio in an internal combustion engine, comprising the steps:

purging a hydrocarbon trap for a period of time; and

adjusting the air/fuel ratio in the engine more rich during said period of time.

6. The method of claim 5, wherein said purging step comprises providing air from an air supply device to an exhaust stream upstream of said hydrocarbon trap.

*Sub 17* 7. The method of claim 6, wherein said air supply device is an air pump. 1

8. A system for controlling an air/fuel ratio in an internal combustion engine, comprising:

a hydrocarbon trap positioned in an exhaust path downstream of the engine;

an air supply device capable of selectively providing a supply of air to said exhaust path upstream of said hydrocarbon trap; and

a controller for adjusting the air/fuel ratio in the engine during a time period when said air pump is providing air to said exhaust path.

*Sub 17* 9. The system of claim 8, wherein said controller causes said air/fuel ratio in the engine to be adjusted rich.

*Sub 17* 10. The system of claim 9, wherein said air supply device is an air pump.